AMENDMENTS TO THE CLAIMS

1. (PREVIOUSLY PRESENTED) An accommodating intraocular lens for implantation in an eye having an optical axis, said lens comprising:

an anterior viewing element comprised of an optic having refractive power of less than 55 diopters;

a first anterior translation member connected to said anterior viewing element at first and second attachment locations;

a posterior viewing element comprised of an optic having refractive power, said optics providing a combined power of 10-30 diopters;

a first posterior translation member connected to said posterior viewing element at third and fourth attachment locations, said first anterior translation member and said first posterior translation member connected at a first apex such that all of said first, second, third and fourth attachment locations are interconnected to one another through said anterior translation member and said posterior translation member;

said anterior optic being mounted to move relative to said posterior optic along the optical axis between an accommodated position and an unaccommodated position in response to action of the ciliary muscle of the eye, said relative movement corresponding to change in the combined power of the optics of at least one diopter;

wherein said lens is configured such that, when said lens in implanted in the eye, said posterior optic is substantially stationary with respect to a location on said optical axis during movement of said anterior optic;

wherein said anterior optic and said posterior optic are positioned further apart when said anterior optic is in the accommodated position than when said anterior optic is in the unaccommodated position, and said anterior optic is biased toward said accommodated position.

2. (ORIGINAL) The lens of Claim 1, wherein said optics are mounted to move relative to each other along the optical axis in response to a contractile force by the ciliary muscle of the eye upon the capsular bag of the eye of up to 2.0 grams.

3. (ORIGINAL) The lens of Claim 1, wherein said anterior viewing element comprises an optic having a refractive power of less than 40 diopters.

4. (ORIGINAL) The lens of Claim 1, wherein said anterior viewing element comprises an optic having a refractive power of less than 35 diopters.

5. (ORIGINAL) The lens of Claim 1, wherein said anterior viewing element comprises an optic having a refractive power of less than 30 diopters.

6. (ORIGINAL) The lens of Claim 1, wherein said posterior viewing element comprises an optic having a refractive power between -25 and 0 diopters.

7. (ORIGINAL) The lens of Claim 1, wherein said posterior viewing element comprises an optic having a refractive power between -25 and -15 diopters.

8. (ORIGINAL) The lens of Claim 1, wherein said posterior viewing element comprises an optic having a refractive power between -15 and 0 diopters.

9. (ORIGINAL) The lens of Claim 1, wherein said posterior viewing element comprises an optic having a refractive power between -13 and -2 diopters.

10. (ORIGINAL) The lens of Claim 1, wherein said posterior viewing element comprises an optic having a refractive power between -10 and -5 diopters.

11. (ORIGINAL) The lens of Claim 1, wherein said relative movement of said optics includes an accommodated position and an unaccommodated position, said optics being about 0.5 - 4 millimeters closer together when in the unaccommodated position.

12. (ORIGINAL) The lens of Claim 1, wherein said relative movement of said optics includes an accommodated position and an unaccommodated position, said optics being about 1 - 3 millimeters closer together when in the unaccommodated position.

13. (ORIGINAL) The lens of Claim 1, wherein said relative movement of said optics includes an accommodated position and an unaccommodated position, said optics being about 1 - 2 millimeters closer together when in the unaccommodated position.

14. (ORIGINAL) The lens of Claim 1, wherein said relative movement of said optics includes an accommodated position and an unaccommodated position, said optics being about 1.5 millimeters closer together when in the unaccommodated position.

15. (ORIGINAL) The lens of Claim 1, wherein:

said lens has a thickness between an anterior face of the anterior viewing element and a posterior face of the posterior viewing element;

said relative movement of said optics includes an accommodated position and an unaccommodated position; and

said thickness decreases from about 3.0 - 4.0 millimeters in the accommodated position to about 1.5 - 2.5 millimeters in the unaccommodated position.

16. (ORIGINAL) The lens of Claim 13, wherein:

said lens has a thickness between an anterior face of the anterior viewing element and a posterior face of the posterior viewing element;

said relative movement of said optics includes an accommodated position and an unaccommodated position; and

said thickness decreases from about 3.0 - 4.0 millimeters in the accommodated position to about 1.5 - 2.5 millimeters in the unaccommodated position.

17. (ORIGINAL) The lens of Claim 14, wherein:

said lens has a thickness between an anterior face of the anterior viewing element and a posterior face of the posterior viewing element;

said relative movement of said optics includes an accommodated position and an unaccommodated position; and

said thickness decreases from about 3.0 - 4.0 millimeters in the accommodated position to about 1.5 - 2.5 millimeters in the unaccommodated position.

18-26. (CANCELLED)

27. (CURRENTLY AMENDED) The lens of Claim 1[[22]], further comprising:

an anterior biasing element comprising first and second anterior translation members extending from the anterior viewing element;

a posterior biasing element comprising first and second posterior translation members extending from the posterior viewing element;

a first anterior abutment connected to said first anterior translation member remote from said anterior viewing element;

a second anterior abutment connected to said second anterior translation member remote from said anterior viewing element;

a first posterior abutment connected to said first posterior translation member remote from said anterior viewing element;

a second posterior abutment connected to said second posterior translation member remote from said posterior viewing element;

wherein said first anterior abutment and said first posterior abutment are in abutting relation and said second anterior abutment and said second posterior abutment are in abutting relation.

28. (PREVIOUSLY PRESENTED) The lens of Claim 27, wherein:

said first anterior abutment further comprises first anterior engagement members;

said first posterior abutment further comprises first posterior engagement members; and

the first anterior engagement members and the first posterior engagement members match so as to the facilitate alignment and assembly of said first anterior abutment and said first posterior abutment.

29. (PREVIOUSLY PRESENTED) The lens of Claim 27, wherein said first anterior abutment and said first posterior abutment are hingedly connected.

30. (PREVIOUSLY PRESENTED) The lens of Claim 27, wherein said anterior abutments and said posterior abutments are curled.

31. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein:
at least one of said viewing elements is a biconvex optic;
said biconvex optic has first and second surfaces;
said first surface has a radius of curvature of about 5.944 mm; and
said second surface has a radius of curvature of about 5.944 mm.

32. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein:
at least one of said viewing elements is a biconvex optic;
said biconvex optic has first and second surfaces;
said first surface has a radius of curvature of about 5.656 mm; and
said second surface has a radius of curvature of about 7.788 mm.

33. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein:
at least one of said viewing elements is a biconvex optic;
said biconvex optic has first and second surfaces;
said first surface has a radius of curvature of about 6.961 mm; and
said second surface has a radius of curvature of about 8.5 mm.

34. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein:
at least one of said viewing elements is a biconcave optic;
said biconcave optic has first and second surfaces;
said first surface has a radius of curvature of about 18.765 mm; and
said second surface has a radius of curvature of about 18.765 mm.

35. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein:

at least one of said viewing elements is a concave-convex optic;

said concave-convex optic has anterior and posterior surfaces;

said concave-convex optic has a refractive power of -8 diopter;

said anterior surface has a radius of curvature of between about 9 mm and 9.534 mm; and

said posterior surface has a radius of curvature of about 40 mm.

36. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein:

at least one of said viewing elements is a concave-convex optic;

said concave-convex optic has anterior and posterior surfaces;

said concave-convex optic has a refractive power of -5 diopter;

said anterior surface has a radius of curvature of between about 9 mm and 9.534 mm; and

said posterior surface has a radius of curvature of about 20 mm.

37. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein:

said anterior viewing element comprises an optic having a refractive power of +31 diopter; and

said posterior viewing element comprises an optic having a refractive power of -10 diopter.

38. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein:

said anterior viewing element comprises an optic having a refractive power of +28 diopter; and

said posterior viewing element comprises an optic having a refractive power of -8 diopter.

39. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein:

said anterior viewing element comprises an optic having a refractive power of +24 diopter; and

said posterior viewing element comprises an optic having a refractive power of -5 diopter.

40-42. (CANCELLED)

43. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein at least one of said optics is a removable optic.

44. (PREVIOUSLY PRESENTED) The lens of Claim 43, wherein at least one of said viewing elements comprises a frame member defining a void therein, wherein said frame member is capable of receiving said removable optic.

45. (PREVIOUSLY PRESENTED) The lens of Claim 44, wherein said removable optic is attached to said frame member.

46. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein at least one of said optics is formed from photosensitive silicone.

47. (PREVIOUSLY PRESENTED) The lens of Claim 1, further comprising a heparin coating over at least a portion of said lens.

48. (PREVIOUSLY PRESENTED) The lens of Claim 47, wherein said coating is applied to at least a portion of the first posterior translation member.

49. (PREVIOUSLY PRESENTED) The lens of Claim 47, wherein said coating is applied to at least a portion of the posterior viewing element.

50. (PREVIOUSLY PRESENTED) The lens of Claim 1, further comprising an active coating over at least a portion of said lens.

51. (PREVIOUSLY PRESENTED) The lens of Claim 50, wherein said coating is selected from the group consisting of P-15 peptides and RGD peptides.

52. (PREVIOUSLY PRESENTED) The lens of Claim 1, further comprising a passive coating over at least a portion of said lens.

53. (PREVIOUSLY PRESENTED) The lens of Claim 52, wherein said coating is selected from the group consisting of heparin, collagen, fibronectin, and laminin.

54. (PREVIOUSLY PRESENTED) The lens of Claim 1, further comprising a coating, over at least a portion of said lens, which coating is inert with respect to the capsular bag of the eye.

55. (PREVIOUSLY PRESENTED) The lens of Claim 54, wherein said coating is selected from the group consisting of hirudin, Teflon, PVDF, and fluorinated polymers.

56. (PREVIOUSLY PRESENTED) The lens of Claim 54, wherein said coating is applied on locations on the lens which contact the capsular bag when implanted.

57. (PREVIOUSLY PRESENTED) The lens of Claim 54, wherein said coating is applied over at least a portion of at least one of said optics.

58. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein at least one surface of said lens is passivated.

59. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein at least one surface of said lens has a surface finish that is rougher than the remaining surfaces of said lens.

60. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein at least one surface of said lens has a textured surface finish.

61. (PREVIOUSLY PRESENTED) The lens of Claim 1, further comprising a posteriorly-extending perimeter wall surrounding a posterior surface of the posterior viewing element.

62. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein said posterior viewing element is relatively thick as measured along the optical axis.

63. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein at least one surface of said lens is polished.

64. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein at least one surface of said lens is cleaned.

65. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein at least one surface of said lens is sterilized.

66. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein at least one surface of said lens is deflashed, polished, and cleaned.

67. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein:

said lens further comprises a second anterior translation member connected to said anterior viewing element, and a second posterior translation member connected to said posterior viewing element; and

said second anterior translation member and said second posterior translation member meet at a second apex.

68. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein the force by the ciliary muscle of the eye is due to relaxation of the ciliary muscle such that tension in the zonules of the eye is increased.

69. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein the force by the ciliary muscle of the eye is due to contraction of the ciliary muscle such that tension in the zonules of the eye is decreased.

70. (CURRENTLY AMENDED) An accommodating intraocular lens for implantation in an eye having an optical axis, said lens comprising:

an anterior portion comprised of an anterior optic having refractive power of less than 55 diopters;

a posterior portion comprised of a posterior optic having refractive power, said optics providing a combined power of 10-30 diopters, the posterior optic being the posterior-most optic in said intraocular lens;

said anterior portion further comprising an anterior biasing element connected to said anterior optic;

said posterior portion further comprising a posterior biasing element connected to said posterior optic;

said anterior optic being mounted to move relative to said posterior optic along said optical axis between an accommodated position and an unaccommodated position in response to action of the ciliary muscle of the eye, said relative movement corresponding to a change in the combined power of the optics of at least one diopter;

said anterior biasing element having a first geometry;

said posterior biasing element having a second geometry different from said first geometry, said geometries of said anterior and posterior biasing elements configured to allow (i) said anterior optic to move over a first range of movement along said optical axis, and (ii) said posterior optic to move over a second range of movement along said optical axis;

wherein said first range of movement is greater than said second range of movement; and

wherein said anterior optic and said posterior optic are positioned further apart when said anterior optic is in the accommodated position than when said anterior optic is in the unaccommodated position, and said anterior optic is biased toward said accommodated position.

71. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein said second range of motion is substantially zero.

72. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein said anterior optic has a refractive power of less than 40 diopters.

73. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein said anterior optic has a refractive power of less than 35 diopters.

74. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein said anterior optic has a refractive power of less than 30 diopters.

75. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein said posterior optic has a refractive power between -25 and 0 diopters.

76. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein said posterior optic has a refractive power between -25 and -15 diopters.

77. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein said posterior optic has a refractive power between -15 and 0 diopters.

78. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein said posterior optic has a refractive power between -13 and -2 diopters.

79. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein said posterior optic has a refractive power between -10 and -5 diopters.

80. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein said relative movement of said optics includes an accommodated position and an unaccommodated position, said optics being about 0.5 - 4 millimeters closer together when in the unaccommodated position.

81. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein said relative movement of said optics includes an accommodated position and an unaccommodated position, said optics being about 1 - 3 millimeters closer together when in the unaccommodated position.

82. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein said relative movement of said optics includes an accommodated position and an unaccommodated position, said optics being about 1 - 2 millimeters closer together when in the unaccommodated position.

83. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein said relative movement of said optics includes an accommodated position and an unaccommodated position, said optics being about 1.5 millimeters closer together when in the unaccommodated position.

84. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein:

said lens has a thickness between an anterior face of the anterior optic and a posterior face of the posterior optic;

said relative movement of said optics includes an accommodated position and an unaccommodated position; and

said thickness decreases from about 3.0 - 4.0 millimeters in the accommodated position to about 1.5 - 2.5 millimeters in the unaccommodated position.

85. (PREVIOUSLY PRESENTED) The lens of Claim 82, wherein:

said lens has a thickness between an anterior face of the anterior optic and a posterior face of the posterior optic;

said relative movement of said optics includes an accommodated position and an unaccommodated position; and

said thickness decreases from about 3.0 - 4.0 millimeters in the accommodated position to about 1.5 - 2.5 millimeters in the unaccommodated position.

86. (PREVIOUSLY PRESENTED) The lens of Claim 83, wherein:

said lens has a thickness between an anterior face of the anterior optic and a posterior face of the posterior optic;

said relative movement of said optics includes an accommodated position and an unaccommodated position; and

said thickness decreases from about 3.0 - 4.0 millimeters in the accommodated position to about 1.5 - 2.5 millimeters in the unaccommodated position.

87. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein:

said anterior optic has a refractive power of +31 diopter; and

said posterior optic has a refractive power of -10 diopter.

88. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein:

said anterior optic has a refractive power of +28 diopter; and

said posterior optic has a refractive power of -8 diopter.

89. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein:

said anterior optic has a refractive power of +24 diopter; and

said posterior optic has a refractive power of -5 diopter.

90. (CANCELLED)

91. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein:

said anterior biasing element comprises an anterior translation member connected to said anterior viewing element, and said posterior biasing element comprises a posterior translation member connected to said posterior viewing element; and

said anterior translation member and said posterior translation member meet at an apex.

92. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein said optics are mounted to move relative to each other along the optical axis in response to a contractile force by the ciliary muscle of the eye upon the capsular bag of the eye of up to 2.0 grams.

93. (PREVIOUSLY PRESENTED) The lens of Claim 70, wherein said anterior optic has a positive refractive power and said posterior optic has a negative refractive power.

94. (PREVIOUSLY PRESENTED) The lens of Claim 1, wherein said anterior optic has a positive refractive power and said posterior optic has a negative refractive power.

95. (NEW) A method of implanting a lens in an eye having an optical axis, said method comprising:

(A) providing an accommodating intraocular lens comprising:

an anterior portion comprised of an anterior optic having refractive power of less than 55 diopters;

a posterior portion comprised of a posterior optic having refractive power, said optics providing a combined power of 10-30 diopters;

said anterior portion further comprising an anterior biasing element connected to said anterior optic;

said posterior portion further comprising a posterior biasing element connected to said posterior optic;

said anterior optic being mounted to move relative to said posterior optic along said optical axis between an accommodated position and unaccommodated position in response to action of the ciliary muscle of the eye, said relative movement corresponding to a change in the combined power of the optics of at least one diopter;

said anterior biasing element having a first geometry;

said posterior biasing element having a second geometry different from said first geometry, said geometries of said anterior and posterior biasing elements configured to allow (i) said anterior optic to move over a first range of movement along said optical axis, and (ii) said posterior optic to move over a second range of movement along said optical axis;

wherein said first range of movement is greater than said second range of movement; and

wherein said anterior optic and said posterior optic are positioned further apart when said anterior optic is in the accommodated position than when said anterior optic is in the unaccommodated position, and said optic is biased toward said accommodated position;

and

(B) positioning said accommodating intraocular lens in a capsular bag of the eye such that said posterior optic is juxtaposed with a posterior of the bag.